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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,113	01/17/2006	Kiyohisa Takahashi	2003JP306	6143

26289 7590 07/12/2007  
AZ ELECTRONIC MATERIALS USA CORP.  
ATTENTION: INDUSTRIAL PROPERTY DEPT.  
70 MEISTER AVENUE  
SOMERVILLE, NJ 08876

EXAMINER
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HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

MAIL DATE	DELIVERY MODE
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07/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/565,113

Applicant(s)

TAKAHASHI ET AL.

Examiner

Cynthia Hamilton

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/9/7.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/9/7</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This application has been transferred to Primary Examiner Cynthia Hamilton since the last Office Action mailed January 31, 2007.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 originally was as follows:

1. A fine pattern forming material comprising a water-soluble resin, a water-soluble crosslinking agent and a solvent consisting of water or a mixed solvent of water and a water-soluble organic solvent, characterized in that the above fine pattern forming material comprises an amine compound which is at least one selected from the group consisting of a primary amine compound consisting of hydrazine, urea, amino acid, a glucosamine derivative and a polyallylamine derivative, an amino group of which is partially protected at least by one selected from the group consisting of an alkyloxycarbonyl group, an aryloxycarbonyl group and an alkylcarbonyl group, and a quaternary amine compound thereof consisting of dimethylammonium salt, trimethylammonium salt, tetramethylammonium salt, dimethylethylbenzylammonium salt and N-methylpyridinium salt and that pH value of the above fine pattern forming material exceeds 7.0.

but was preliminarily amended before the last Office action to as follows:

1.(currently amended) A fine pattern forming material comprising a water-soluble resin, a water-soluble crosslinking agent, a solvent consisting of water or a mixed solvent of water and a water-soluble organic solvent, and an amine compound which is at least one selected from the group of a primary amine compound selected from a group of hydrazine, urea, amino acid, a glucosamine derivative and a polyallylamine derivative, where the amino group of the polyallylamine is partially protected at least by one selected from the group of an alkyloxycarbonyl group, an aryloxycarbonyl group and an alkylcarbonyl group, and a quaternary amine compound selected from a group of dimethylammonium salt, trimethylammonium salt, tetramethylammonium salt, dimethylethylbenzylammonium salt and N-methylpyridinium salt and that pH value of the fine pattern forming material exceeds 7.0.

Claim 1 is currently as follows:

1.(currently amended) A fine pattern forming material comprising a water-soluble resin, a water-soluble crosslinking agent, a solvent consisting of water or a mixed solvent of water and a water-soluble organic solvent,

a polyallylamine derivative where the amino group of the polyallylamine is partially protected at least by one selected from the group of an alkyloxycarbonyl group, an aryloxycarbonyl group and an alkylcarbonyl group, and a quaternary amine compound selected from a group of dimethylammonium salt, trimethylammonium salt, tetramethylammonium salt, dimethylethylbenzylammonium salt and N-methylpyridinium salt and that pH value of the fine pattern forming material exceeds 7.0.

The examiner has carefully reviewed the examples in applicants' specification and found no indication of a fine pattern forming material comprised of (1) a water-soluble resin, (2) a water-soluble crosslinking agent, (3) a solvent consisting of water or a mixed solvent of water and a water-soluble organic solvent, (4) a polyallylamine derivative, and (5) a quaternary amine. The original claim 1 put the polyallyl amine derivative as an alternative choice to the quaternary amine. The examples in the original specification with the polyallylamine derivative do not have all five components now listed as required in claims 1-11. Applicants have not made clear where such support is found for this five component material. Thus, the examiner believes that Applicants has not pointed out where the amended (or new) claim is supported, nor does there appear to be a written description of the claim limitation found in the application as filed. See particularly MPEP 2163.04.

5. The examiner notes for the record that applicants have defined polyallylamine on page 11 of their specification as:

acid salt thereof, etc. A polyallylamine derivative is ones wherein an amino group of the allylamine is partially protected with an alkyloxycarbonyl group, an aryloxycarbonyl group or an alkylcarbonyl group in a polymer of allylamine or in a copolymer between allylamine and other monomer. An introduction of the above protecting group into

This appears to be a specific definition of the term set forth by applicants and the examiner has taken it to so limit the "polyallylamine derivative" of applicant's disclosure.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

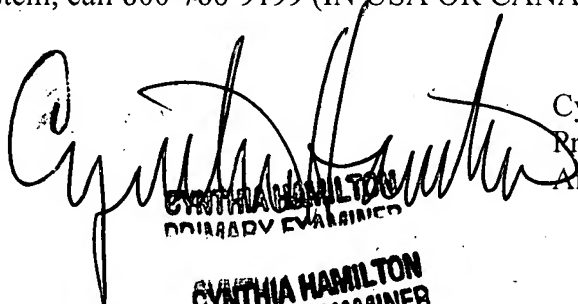
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 9, 2007



CYNTHIA HAMILTON  
PRIMARY EXAMINER

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Cynthia Hamilton  
Primary Examiner  
Art Unit 1752